

WHAT IS CLAIMED IS:

1. A audio wireless signal generating unit, the unit comprising:

audio signal source generating an audio signal, and

5 a signal generating unit detachably coupled to the audio signal source, the signal generating unit including;

modulation component, the modulation component responsive to the audio signal for modulating a wireless signal therewith; and

10 a power supply responsive to the audio signal for generating a voltage, the voltage powering the modulation component.

2. The unit as recited in claim 1 wherein the power  
15 supply includes a rectifying component and a filtering component.

3. The unit as recited in claim 1 wherein the modulation component includes a carrier frequency  
20 component.

4. An audio signal receiving unit, the unit comprising:

an audio signal receiving component, the audio signal  
25 receiving component generating a microphone pickup voltage; and

a wireless receiving unit, the wireless receiving unit detecting and demodulating a wireless signal, the wireless receiving unit applying an audio signal to the audio signal receiving component, the wireless receiving unit being  
5 powered by the microphone pickup voltage.

5. The audio signal receiving unit as recited in claim 4 wherein the wireless receiving unit is detachably coupled to the audio signal receiving unit.

10

6. The audio signal receiving unit as recited in claim 4 wherein the wireless receiving unit includes a charge pump, the charge pump increasing the microphone pickup voltage level.

15

7. The method of powering a device generating a wireless signal modulated with an audio signal, the method comprising using a portion of the audio signal to provide power to the device.

20

8. The method as recited in claim 7 wherein the using step includes rectifying and filtering the portion of the audio signal.

25

9. An audio system, the system comprising:  
an audio signal source, the audio signal source generating an audio signal;

a wireless transmission unit receiving the audio signal, the wireless transmission unit modulating a carrier signal with the audio signal, wherein the wireless transmission unit is powered by the audio signal; and

5 an audio signal receiver, the audio receiver separating the audio signal from the carrier signal.

10 10. The system as recited in claim 9 wherein the separation of the audio signal from carrier signal is performed in a wireless receiver unit, the wireless receiver unit being detachable from the audio signal receiver, the wireless receiver unit being powered by a microphone pickup voltage.

15 11. In a audio receiver unit in which a wireless receiving unit is detachably coupled to an audio signal receiver, the method of powering the wireless receiving unit, the method comprising:

20 powering the wireless receiver unit with a microphone pickup voltage from the audio signal receiver.